

Work Order ID 86230

86230

Page 1

June-25-12 10:30:58 AM

Item ID: D3535-15 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Wearshoe
Start Date: 25/06/2012 Start Qty: 8.00 ***8*** Cust Item ID:
Required Date: 10/07/2012 Req'd Qty: 8.00 ***8*** Customer:
Reference:

Approvals: Process Plan: MLJ Date: 12/06/25 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr					(10)			
D3535	Rev B								

100 0.00
100 FLOW WATER JET
Waterjet Memo 0.00 B12-6-26
FLOW CNC Waterjet 1-Cut as per Dwg D3535 Dwg Rev: B Prog Rev: B 2-
304 1040 Deburr if necessary

110 0.00
110 QC2- Inspect parts off machine FAI/FAIB
QC Memo 0.00 B17-6-20
Quality Control

120 0.00
120 QC8- Inspect parts - second check
QC Memo 0.00 Sidbebe (10)
Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Work Order ID 86230

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Page 2

June-25-12 10:30:58 AM

Item ID: D3535-15

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Wearshoe

Stop *NS2*

Start Date: 25/06/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 10/07/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	NC BRAKE								
Brake NC	Memo	0.00							
Brake NC	1-Form on Brake as per Dwg D3535 using Jigs DT8261 and DT83262-Form joggle as per Dwg D3535 using Jig DT81583-Identify as D3535-15								
140		0.00							
140	QC5- Inspect part completeness to step on W/O								
QC	Memo	0.00							
Quality Control									
150		0.00							
150	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3								
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 7:40 OVEN TEMPERATURE:								
	FINISH TIME: 8:10								

10

SB 12/07/04

410

5 12/07/04

mk

10X

12/07/04

M121279

3200F

8:10

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Picklist Print

June-25-12 10:31:03 AM

Page 1

Work Order ID: 86230

86230

Parent Item: D3535-15

D3535-15

Parent Item Name: Wearshoe

Start Date: 25/06/2012

Required Date: 10/07/2012

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A New Issue 07-02-15 JLM
IPP Rev:B As per Rev B 07-08-31 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA		Purchased	No			100	sf	352.7693	1.0205	8.593684	11.		
M304S20GA										**		B12-6-2C	
304/316 .040 Sheet													

Location

Loc Qty

Loc Code

001	52.4914105	
121192	52.4914105	
MAT020	300.277922	
117933	27.3442	
118400	5.3723	
118964	23.2	
119346	24.8	
121380	49.761422	
121901	169.8	

121901

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DART AEROSPACE LTD		Work Order: 86230
Description: Wearshoe		Part Number: D3535-15
Inspection Dwg: D3535	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.885	+/-0.010	1.890	2		V B2	
2.000	+/-0.010	2.000	2		V	
5.650	+/-0.010	5.650	✓		T B2	
9.150	+/-0.010	9.150	✓		T	
14.400	+/-0.010	14.400	✓		T	
19.650	+/-0.010	19.650	✓		T	
24.900	+/-0.010	24.900	✓		T	
30.150	+/-0.010	30.150	✓		T	
33.650	+/-0.010	33.650	✓		T	
35.650	+/-0.010	35.650	✓		T	
39.150	+/-0.010	39.150	✓		T	
Ø0.188	+0.005/-0.001	.190	✓		V	
24.00	+/-0.030	24.00	✓		T	
16.00	+/-0.030	16.00	✓		T	
8.00	+/-0.030	8.00	✓		T	
5.00	+/-0.030	5.00	✓		T	
0.300	+/-0.010	.304	✓		V	
0.300	+/-0.010	.301	✓		V	
0.038	+/-0.010	.037	2		V	

Measured by: RB	Audited by: S	Prototype Approval:	N/A
Date: 12-6-06	Date: 12/06/07	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.05.10	New Issue	KJ/JLM	E

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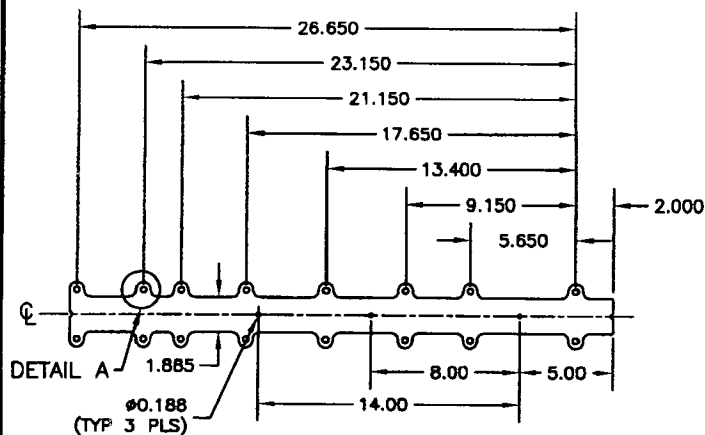
NOTE: Date & initial all entries

DART

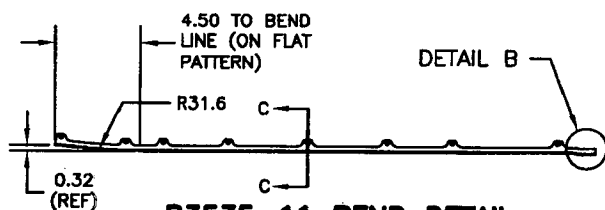
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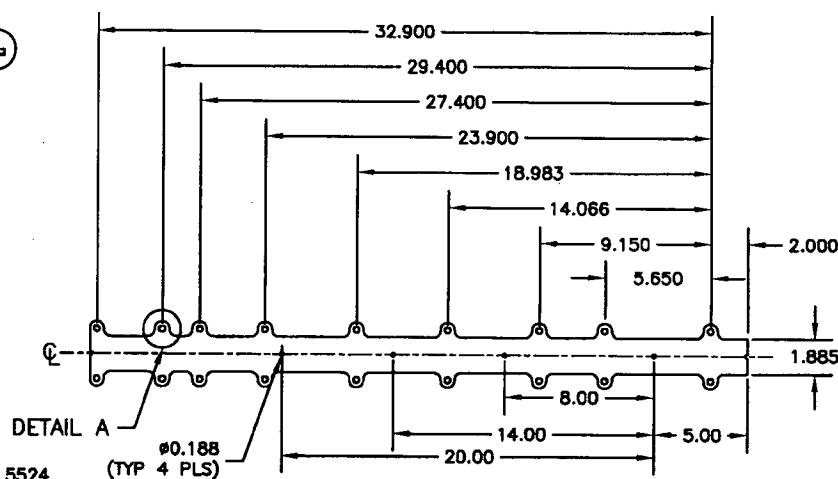
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 86230 MLJ
12/06/30



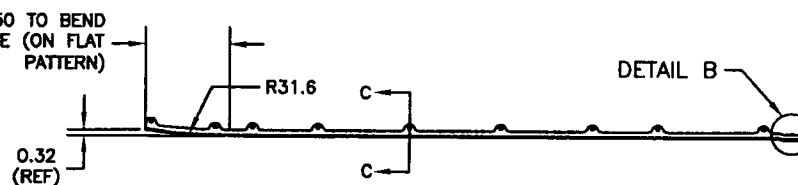
D3535-11F FLAT PATTERN



D3535-11 BEND DETAIL



D3535-13F FLAT PATTERN



D3535-13 BEND DETAIL

NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER QSI 005 4.3
- 3) PART IS SYMMETRICAL ABOUT C
- 4) TOLERANCES ARE PER DART QSI 013 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES TO 0.010 MAX
- 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT PAINT MARKER
- 8) SEE PAGE 7 FOR DETAILS AND SECTION

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.	
CB	PH	PORT HADLOCK, WA	
CHECKED	APPROVED	DRAWING NO.	REV. B
PH	PH	D3535	SHEET 1 OF 7
DATE	TITLE	SCALE	
07.04.17	WEARSHOE	1:10	
A	06.10.25	NEW ISSUE	
B	07.04.17	MOVE TAB OUTBOARD, ADD AMS SPEC	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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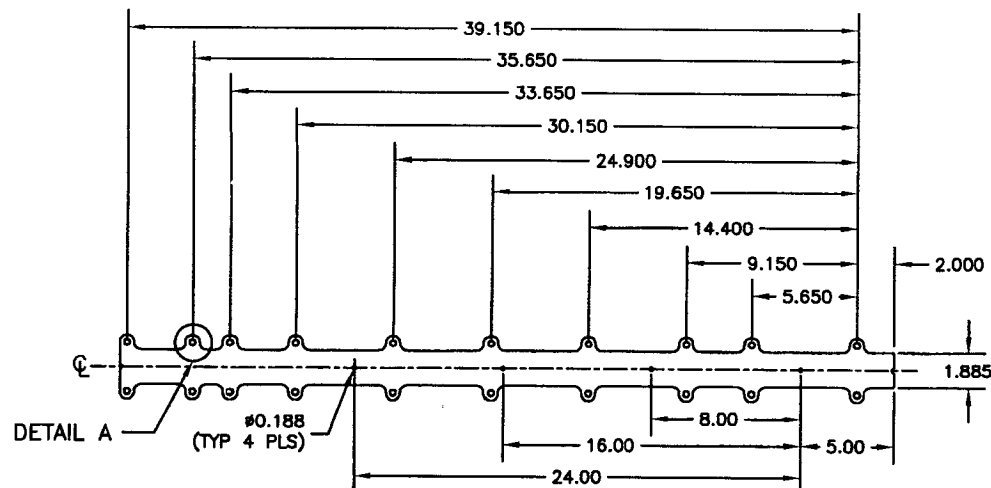
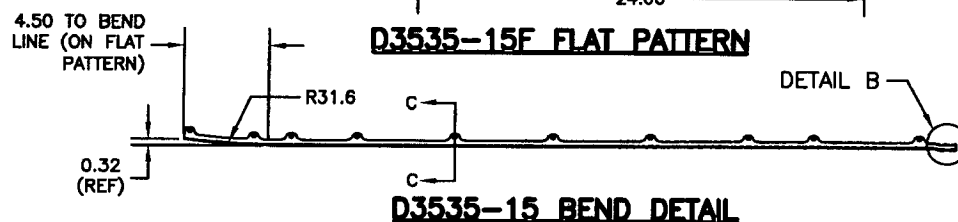
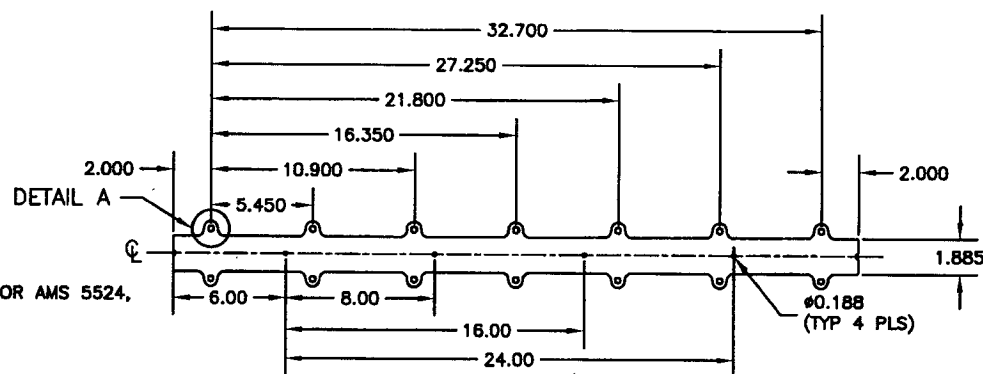
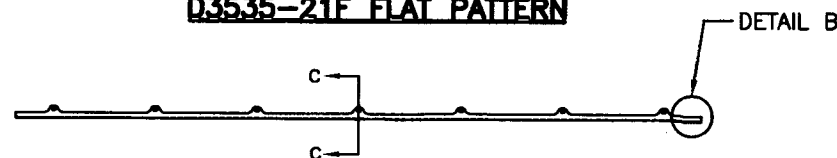
NOTE: Date & initial all entries

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**D3535-15F FLAT PATTERN****D3535-15 BEND DETAIL****D3535-21F FLAT PATTERN****D3535-21 BEND DETAIL****NOTES**

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANDEX (4.3.5.6) PER QSI 005 4.3
- 3) PART IS SYMMETRICAL ABOUT ϕ
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES TO 0.010 MAX
- 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT PAINT MARKER
- 8) SEE PAGE 7 FOR DETAILS AND SECTION

DESIGN CB	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3535
DATE 07.04.17	TITLE WEARSHOE	REV. B SHEET 2 OF 7
	SCALE 1:10	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

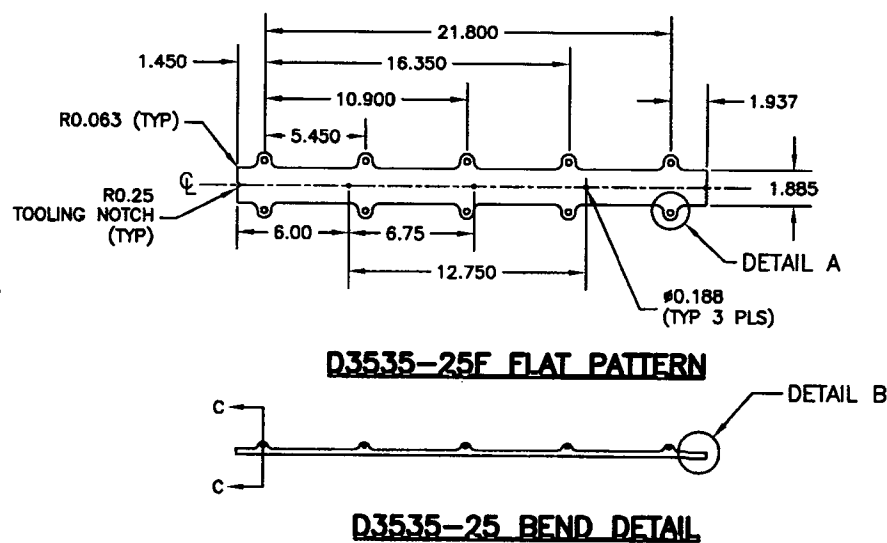
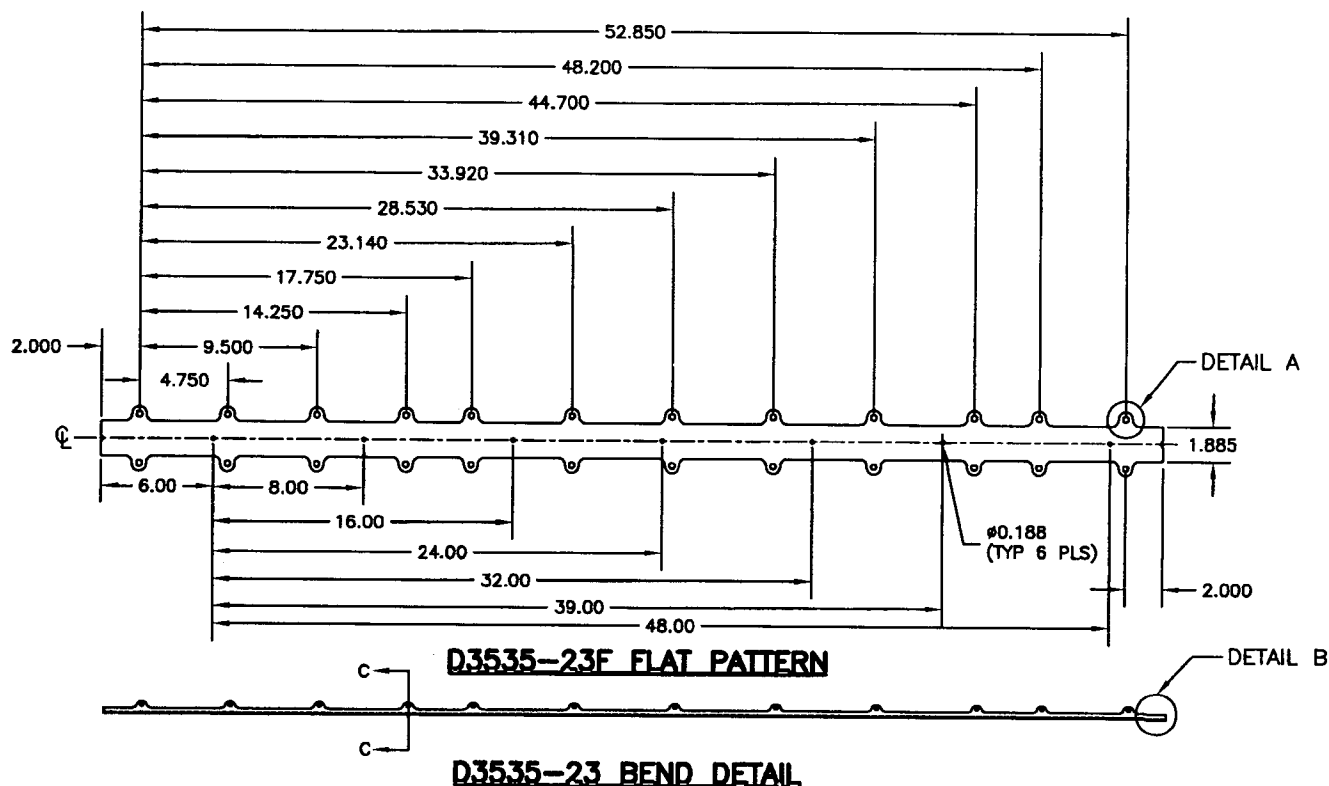
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CHECKED		APPROVED		PORT HADLOCK, WA
DATE	07.04.17	TITLE	D3535	REV. B
			WEARSHOE	SHEET 3 OF 7
				SCALE 1:10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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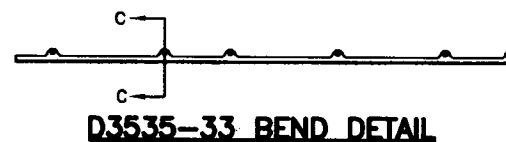
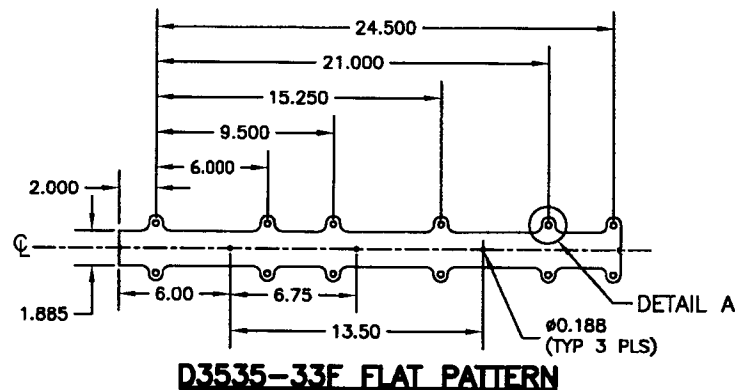
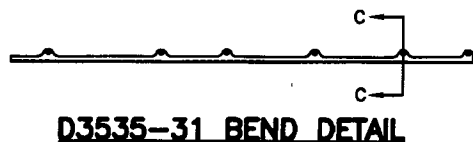
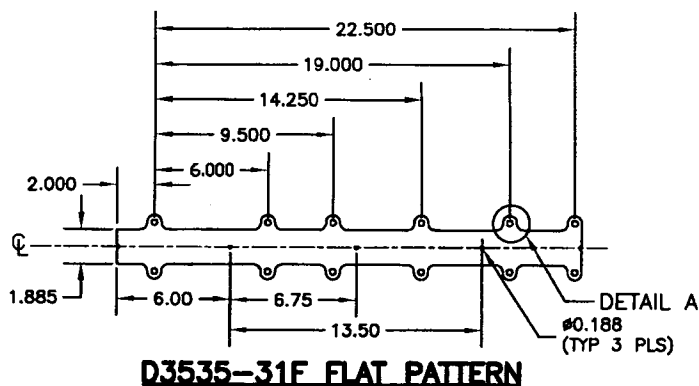
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3535	REV. B
DATE 07.04.17	TITLE WEARSHOE	SHEET 4 OF 7	SCALE 1:10

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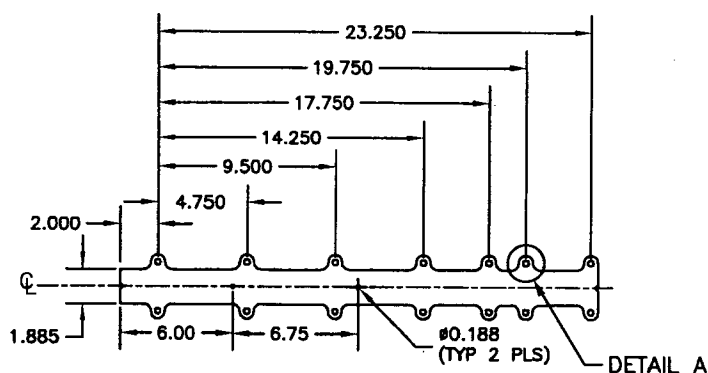
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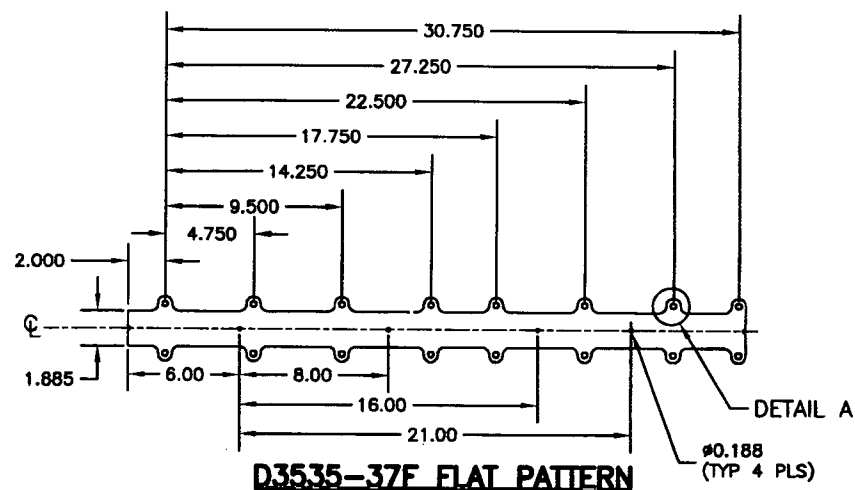
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D3535-35F FLAT PATTERN



D3535-35 BEND DETAIL



D3535-37F FLAT PATTERN



D3535-37 BEND DETAIL

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CHECKED		APPROVED		PORT HADLOCK, WA
DATE	07.04.17	TITLE	D3535	REVISION
			WEARSHOE	SHEET 5 OF 7
				SCALE
				1:10

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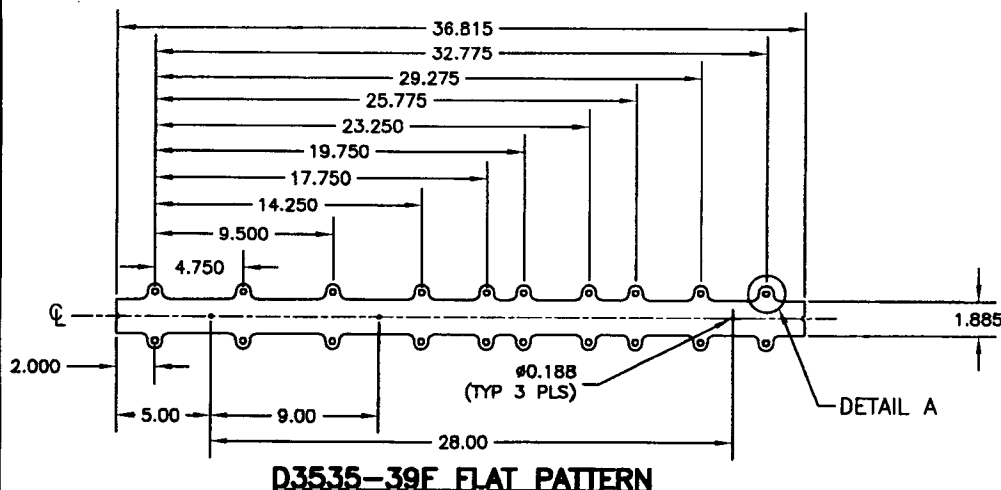
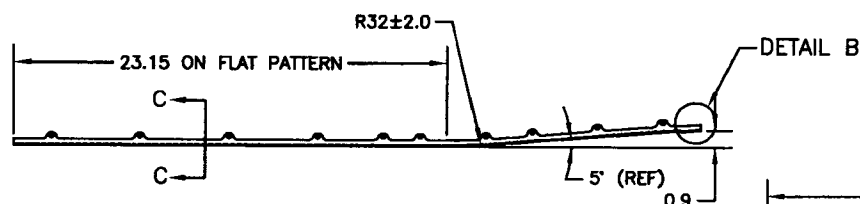
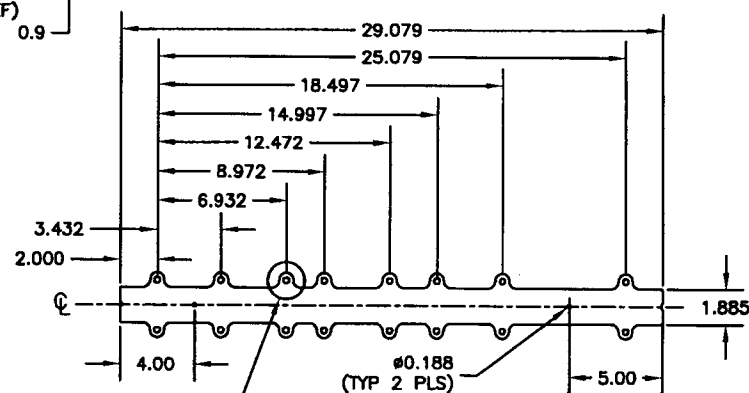
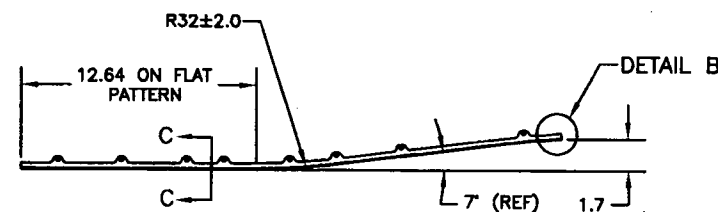
NOTE: Date & initial all entries

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**D3535-39F FLAT PATTERN****D3535-39 BEND DETAIL****D3535-41F FLAT PATTERN****D3535-41 BEND DETAIL****NOTES**

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CHECKED		APPROVED		PORT HADLOCK, WA
DATE	07.04.17	DRAWING NO.	D3535	REV. B
TITLE	WEARSHOE	SHEET 6 OF 7	SCALE	1:1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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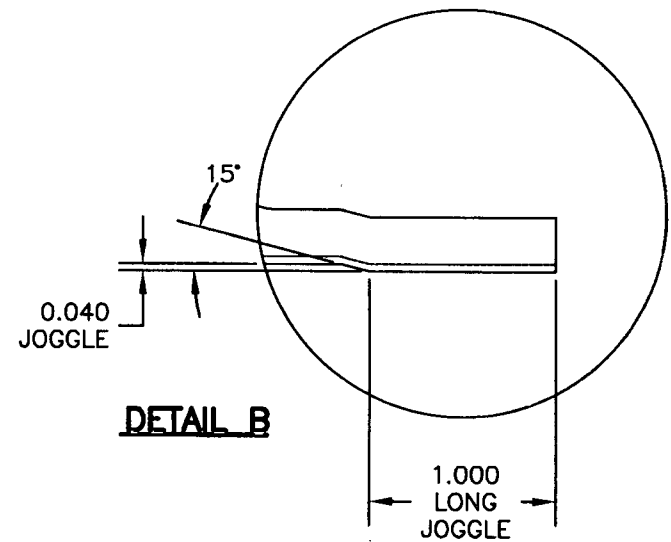
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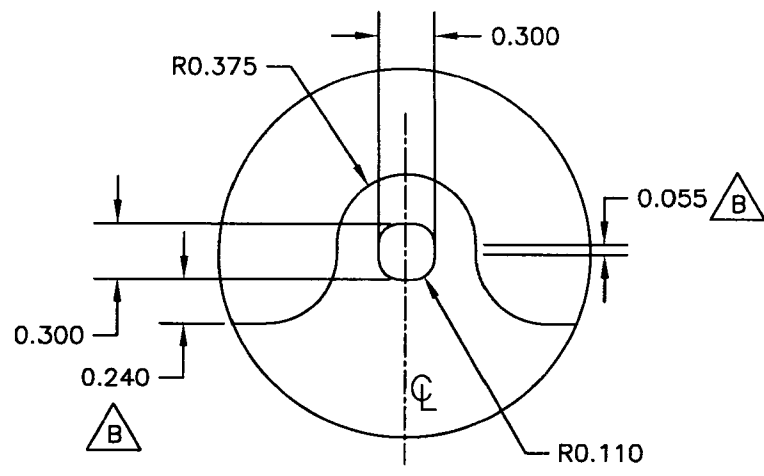


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07.01.24

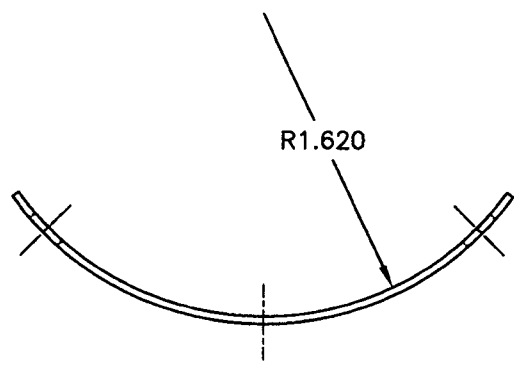
DESIGN	C B	DRAWN BY	PH	DART AEROSPACE USA, INC.
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	PORT HADLOCK, WA
DATE	07.04.17	DRAWING NO.	D3535	REV. B
		TITLE	WEARSHOE	SHEET 7 OF 7
		SCALE	1:1	



DETAIL B



DETAIL A



SECTION C-C

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries